

Performance - 2.5

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-----STOP WORDS REMOVED-----

===== BASE-MNB =====

Emotion Score: 0.3925619834710744

Emotion Classification Report:

	precision	recall	f1-score	support
admiration	0.49	0.44	0.46	2141
amusement	0.53	0.35	0.42	1178
anger	0.35	0.13	0.19	1060
annoyance	0.18	0.07	0.10	1584
approval	0.25	0.09	0.13	2240
caring	0.28	0.04	0.07	721
confusion	0.32	0.06	0.11	999
curiosity	0.39	0.09	0.15	1188
desire	0.37	0.05	0.09	389
disappointment	0.30	0.05	0.09	965
disapproval	0.25	0.07	0.11	1558
disgust	0.38	0.08	0.13	582
embarrassment	0.48	0.03	0.06	316
excitement	0.24	0.04	0.07	586
fear	0.40	0.07	0.12	348
gratitude	0.75	0.70	0.72	1360
grief	0.00	0.00	0.00	78
joy	0.41	0.14	0.21	897
love	0.61	0.38	0.47	1014
nervousness	0.50	0.01	0.01	156
neutral	0.37	0.84	0.52	11161
optimism	0.45	0.17	0.25	894
pride	0.33	0.01	0.02	128
realization	0.22	0.04	0.06	964
relief	0.00	0.00	0.00	162
remorse	0.47	0.09	0.15	303
sadness	0.38	0.10	0.16	727
surprise	0.34	0.11	0.16	665
accuracy		0.39		34364
macro avg	0.36	0.15	0.18	34364

weighted avg 0.38 0.39 0.32 34364

Sentiment Score: 0.5360551740193226

Sentiment Classification Report

	precision	recall	f1-score	support
ambiguous	0.41	0.20	0.27	3816
negative	0.53	0.51	0.52	7677
neutral	0.48	0.49	0.48	11161
positive	0.60	0.71	0.65	11710
accuracy		0.54		34364
macro avg	0.51	0.48	0.48	34364
weighted avg	0.53	0.54	0.52	34364

===== BASE-DT =====

Emotion Score: 0.3611046443952974

Emotion Classification Report:

	precision	recall	f1-score	support
admiration	0.41	0.56	0.47	2141
amusement	0.39	0.55	0.46	1178
anger	0.25	0.37	0.30	1060
annoyance	0.14	0.22	0.18	1584
approval	0.19	0.25	0.22	2240
caring	0.22	0.27	0.24	721
confusion	0.23	0.28	0.25	999
curiosity	0.33	0.33	0.33	1188
desire	0.23	0.32	0.27	389
disappointment	0.17	0.18	0.17	965
disapproval	0.26	0.24	0.25	1558
disgust	0.24	0.17	0.20	582
embarrassment	0.24	0.18	0.21	316
excitement	0.17	0.15	0.16	586
fear	0.38	0.37	0.38	348
gratitude	0.73	0.72	0.73	1360
grief	0.10	0.09	0.09	78
joy	0.28	0.24	0.26	897
love	0.55	0.52	0.54	1014
nervousness	0.18	0.13	0.15	156
neutral	0.50	0.44	0.47	11161
optimism	0.36	0.20	0.26	894
pride	0.17	0.09	0.12	128
realization	0.19	0.08	0.11	964
relief	0.24	0.07	0.11	162
remorse	0.40	0.29	0.34	303

sadness	0.34	0.20	0.25	727
surprise	0.37	0.20	0.26	665

accuracy		0.36	34364	
macro avg	0.30	0.28	0.28	34364
weighted avg	0.37	0.36	0.36	34364

Sentiment Score: 0.5390815970201374

Sentiment Classification Report

	precision	recall	f1-score	support
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ambiguous	0.35	0.46	0.40	3816
negative	0.51	0.59	0.54	7677
neutral	0.51	0.48	0.49	11161
positive	0.70	0.59	0.64	11710

accuracy		0.54	34364	
macro avg	0.52	0.53	0.52	34364
weighted avg	0.55	0.54	0.54	34364

===== BASE-MLP =====

Emotion Score: 0.42084739844022817

Emotion Classification Report:

	precision	recall	f1-score	support
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admiration	0.49	0.47	0.48	2141
amusement	0.50	0.59	0.54	1178
anger	0.38	0.14	0.20	1060
annoyance	0.20	0.02	0.03	1584
approval	0.52	0.04	0.08	2240
caring	0.00	0.00	0.00	721
confusion	0.50	0.00	0.00	999
curiosity	0.91	0.02	0.03	1188
desire	0.29	0.01	0.01	389
disappointment	1.00	0.00	0.00	965
disapproval	0.08	0.00	0.00	1558
disgust	0.50	0.02	0.04	582
embarrassment	1.00	0.00	0.00	316
excitement	0.40	0.00	0.01	586
fear	0.00	0.00	0.00	348
gratitude	0.80	0.76	0.78	1360
grief	1.00	0.00	0.00	78
joy	0.38	0.15	0.21	897
love	0.56	0.63	0.59	1014
nervousness	1.00	0.00	0.00	156
neutral	0.39	0.91	0.54	11161

optimism	0.52	0.23	0.32	894
pride	1.00	0.00	0.00	128
realization	1.00	0.00	0.00	964
relief	1.00	0.00	0.00	162
remorse	0.44	0.51	0.47	303
sadness	0.54	0.13	0.21	727
surprise	0.44	0.05	0.08	665
accuracy		0.42		34364
macro avg	0.57	0.17	0.17	34364
weighted avg	0.47	0.42	0.31	34364

Sentiment Score: 0.5579385403329066

Sentiment Classification Report

precision	recall	f1-score	support
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ambiguous	0.51	0.14	0.22	3816
negative	0.58	0.44	0.50	7677
neutral	0.47	0.69	0.55	11161
positive	0.69	0.65	0.67	11710
accuracy		0.56		34364
macro avg	0.56	0.48	0.49	34364
weighted avg	0.57	0.56	0.54	34364

===== TOP-MNB =====

Best Emotion Score: 0.38287887008857885

Best Emotion Estimator: MultinomialNB(alpha=0.5)

Emotion Classification Report:

precision	recall	f1-score	support
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admiration	0.47	0.50	0.48	2141
amusement	0.49	0.46	0.47	1178
anger	0.33	0.20	0.25	1060
annoyance	0.18	0.10	0.13	1584
approval	0.23	0.12	0.15	2240
caring	0.23	0.10	0.14	721
confusion	0.29	0.11	0.16	999
curiosity	0.38	0.14	0.21	1188
desire	0.32	0.11	0.17	389
disappointment	0.25	0.08	0.12	965
disapproval	0.22	0.11	0.15	1558
disgust	0.31	0.12	0.17	582
embarrassment	0.38	0.06	0.10	316
excitement	0.21	0.07	0.11	586

fear	0.41	0.18	0.25	348
gratitude	0.71	0.75	0.73	1360
grief	0.00	0.00	0.00	78
joy	0.39	0.22	0.28	897
love	0.57	0.49	0.53	1014
nervousness	0.23	0.02	0.04	156
neutral	0.40	0.74	0.52	11161
optimism	0.41	0.26	0.32	894
pride	0.07	0.01	0.01	128
realization	0.17	0.06	0.09	964
relief	0.25	0.01	0.01	162
remorse	0.39	0.17	0.23	303
sadness	0.34	0.19	0.24	727
surprise	0.28	0.15	0.19	665
accuracy		0.40		34364
macro avg	0.32	0.20	0.22	34364
weighted avg	0.36	0.40	0.35	34364

Best Sentiment Score: 0.5324612767069733

Best Sentiment Estimator: MultinomialNB(alpha=1)

Sentiment Classification Report

	precision	recall	f1-score	support
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ambiguous	0.41	0.20	0.27	3816
negative	0.53	0.51	0.52	7677
neutral	0.48	0.49	0.48	11161
positive	0.60	0.71	0.65	11710
accuracy		0.54		34364
macro avg	0.51	0.48	0.48	34364
weighted avg	0.53	0.54	0.52	34364

===== TOP-DT =====

Best Emotion Score: 0.41945058029202614

Best Emotion Estimator: DecisionTreeClassifier(max_depth=100, min_samples_split=30)

Emotion Classification Report:

	precision	recall	f1-score	support
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admiration	0.45	0.44	0.45	2141
amusement	0.49	0.55	0.52	1178
anger	0.33	0.19	0.24	1060
annoyance	0.16	0.05	0.07	1584
approval	0.24	0.05	0.09	2240

caring	0.19	0.05	0.08	721
confusion	0.35	0.08	0.13	999
curiosity	0.43	0.08	0.13	1188
desire	0.35	0.19	0.24	389
disappointment	0.27	0.05	0.08	965
disapproval	0.24	0.05	0.09	1558
disgust	0.39	0.14	0.20	582
embarrassment	0.35	0.08	0.12	316
excitement	0.24	0.06	0.10	586
fear	0.45	0.24	0.31	348
gratitude	0.79	0.73	0.76	1360
grief	0.17	0.03	0.04	78
joy	0.38	0.20	0.26	897
love	0.57	0.62	0.59	1014
nervousness	0.20	0.06	0.09	156
neutral	0.41	0.85	0.55	11161
optimism	0.53	0.24	0.33	894
pride	0.33	0.05	0.09	128
realization	0.24	0.02	0.05	964
relief	0.33	0.03	0.06	162
remorse	0.45	0.46	0.45	303
sadness	0.46	0.18	0.25	727
surprise	0.40	0.21	0.27	665
accuracy		0.42		34364
macro avg	0.36	0.21	0.24	34364
weighted avg	0.39	0.42	0.35	34364

Best Sentiment Score: 0.5154012619915243

Best Sentiment Estimator: DecisionTreeClassifier(max_depth=100, min_samples_split=30)

Sentiment Classification Report

	precision	recall	f1-score	support
ambiguous	0.42	0.15	0.23	3816
negative	0.55	0.32	0.41	7677
neutral	0.43	0.75	0.55	11161
positive	0.70	0.53	0.61	11710
accuracy		0.51		34364
macro avg	0.52	0.44	0.45	34364
weighted avg	0.55	0.51	0.50	34364

===== TOP-MLP =====

Best Emotion Score: 0.40468225933106056

Best Emotion Estimator: MLPClassifier(activation='identity', hidden_layer_sizes=(5, 10), max_iter=2)

Emotion Classification Report:

	precision	recall	f1-score	support
admiration	0.43	0.45	0.44	2141
amusement	0.48	0.54	0.51	1178
anger	0.30	0.10	0.15	1060
annoyance	0.08	0.00	0.00	1584
approval	0.00	0.00	0.00	2240
caring	0.50	0.00	0.00	721
confusion	1.00	0.00	0.00	999
curiosity	0.83	0.00	0.01	1188
desire	0.00	0.00	0.00	389
disappointment	0.00	0.00	0.00	965
disapproval	0.35	0.01	0.01	1558
disgust	0.45	0.10	0.17	582
embarrassment	0.00	0.00	0.00	316
excitement	0.00	0.00	0.00	586
fear	0.00	0.00	0.00	348
gratitude	0.82	0.74	0.78	1360
grief	0.00	0.00	0.00	78
joy	0.31	0.09	0.14	897
love	0.50	0.61	0.55	1014
nervousness	0.00	0.00	0.00	156
neutral	0.39	0.91	0.54	11161
optimism	0.49	0.31	0.38	894
pride	0.00	0.00	0.00	128
realization	0.00	0.00	0.00	964
relief	0.00	0.00	0.00	162
remorse	0.00	0.00	0.00	303
sadness	0.22	0.20	0.21	727
surprise	0.00	0.00	0.00	665
accuracy		0.41		34364
macro avg	0.25	0.15	0.14	34364
weighted avg	0.35	0.41	0.29	34364

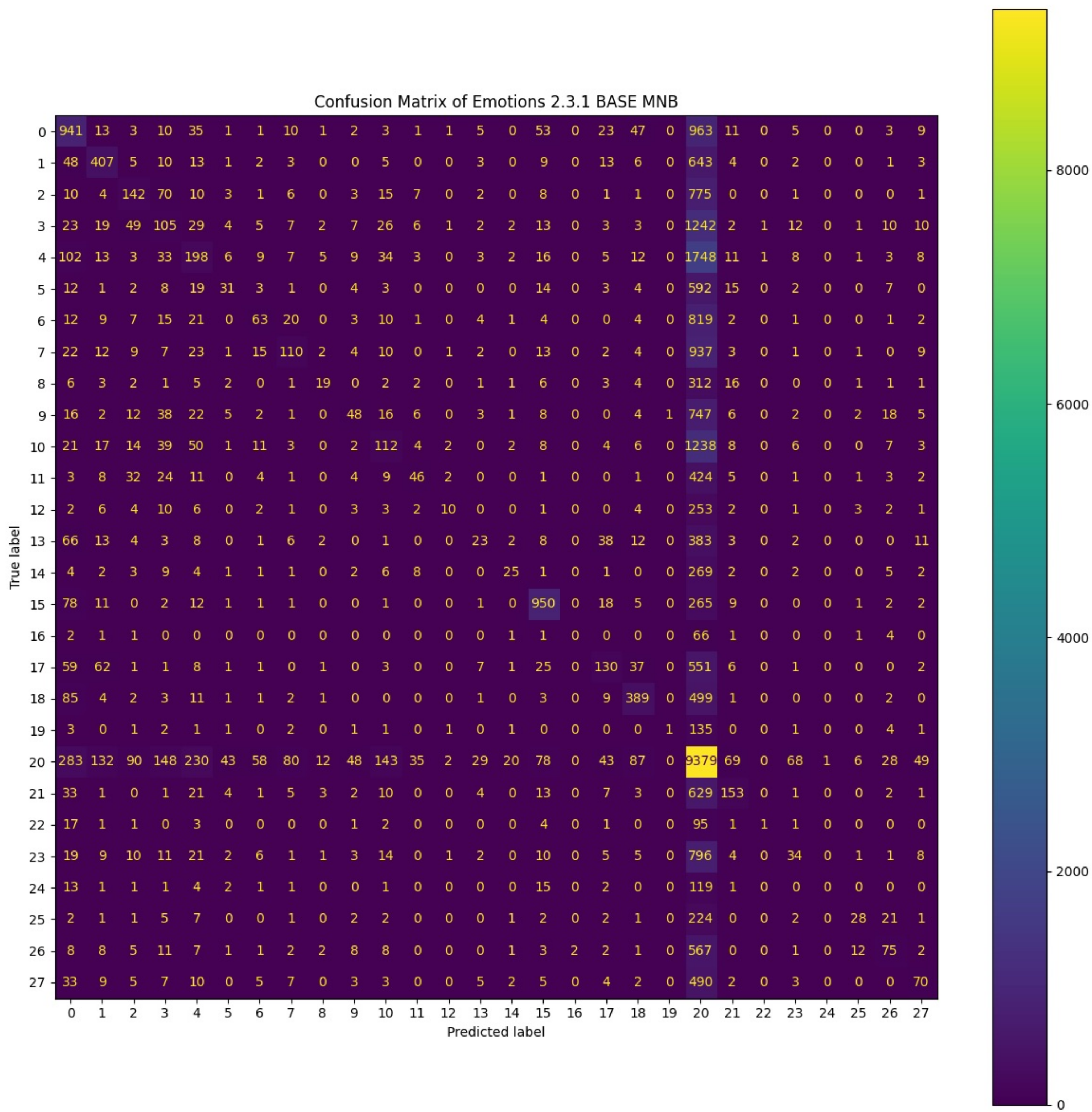
Best Sentiment Score: 0.556308900174004

Best Sentiment Estimator: MLPClassifier(activation='identity', hidden_layer_sizes=(5, 5), max_iter=2)

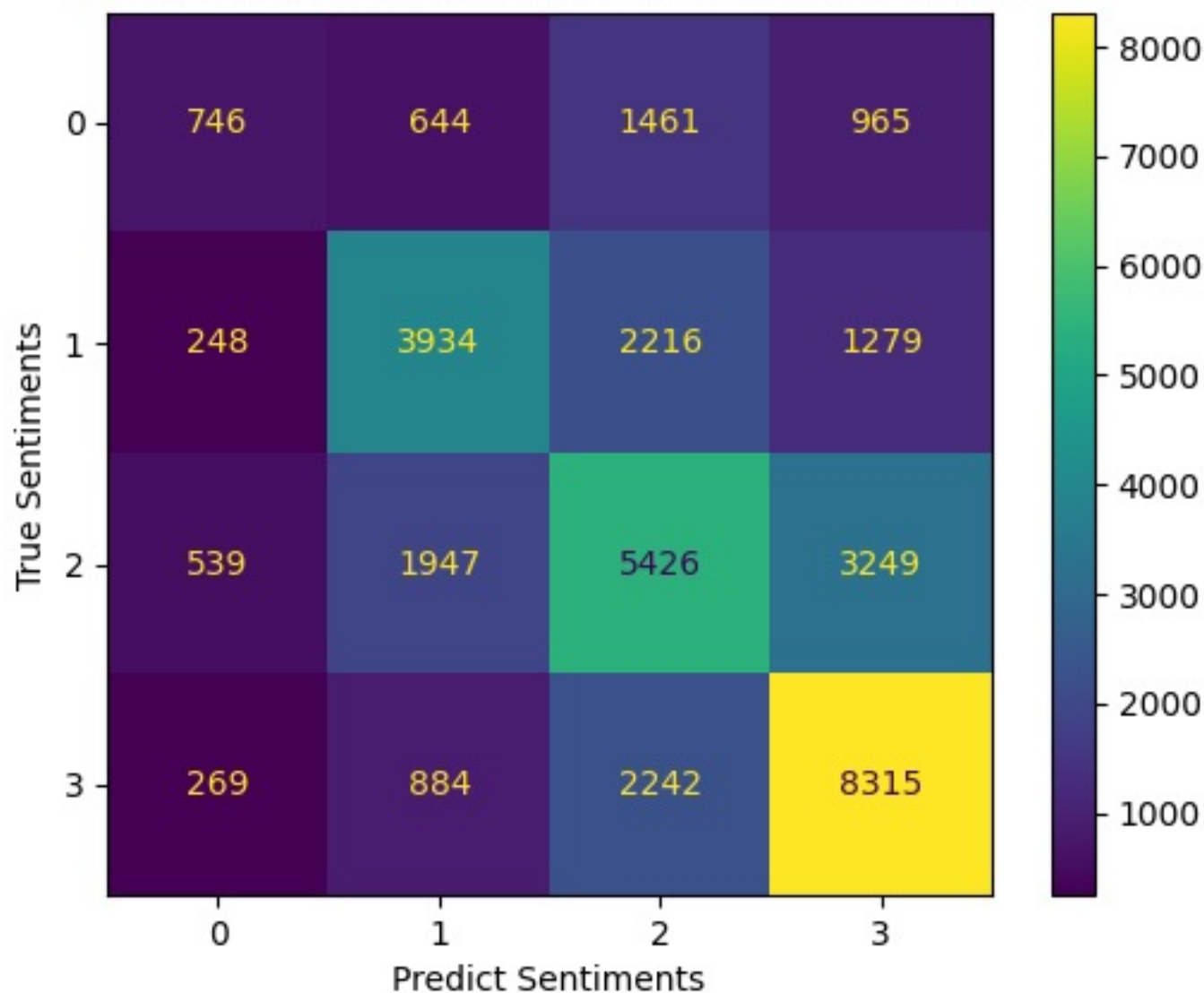
Sentiment Classification Report

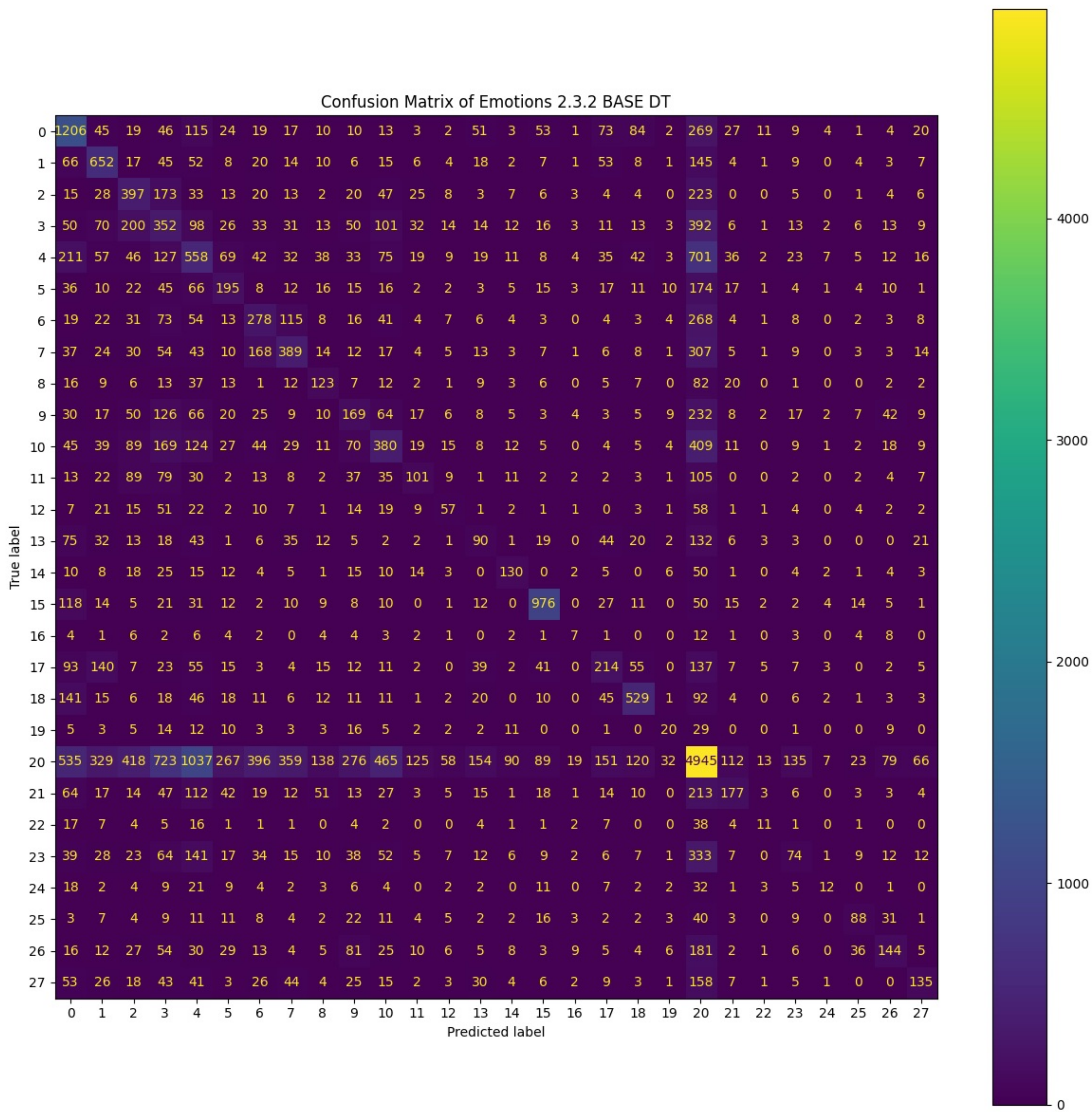
	precision	recall	f1-score	support
ambiguous	0.46	0.16	0.24	3816
negative	0.55	0.51	0.53	7677
neutral	0.48	0.61	0.54	11161
positive	0.68	0.67	0.67	11710

accuracy		0.56		34364
macro avg	0.54	0.49	0.49	34364
weighted avg	0.56	0.56	0.55	34364

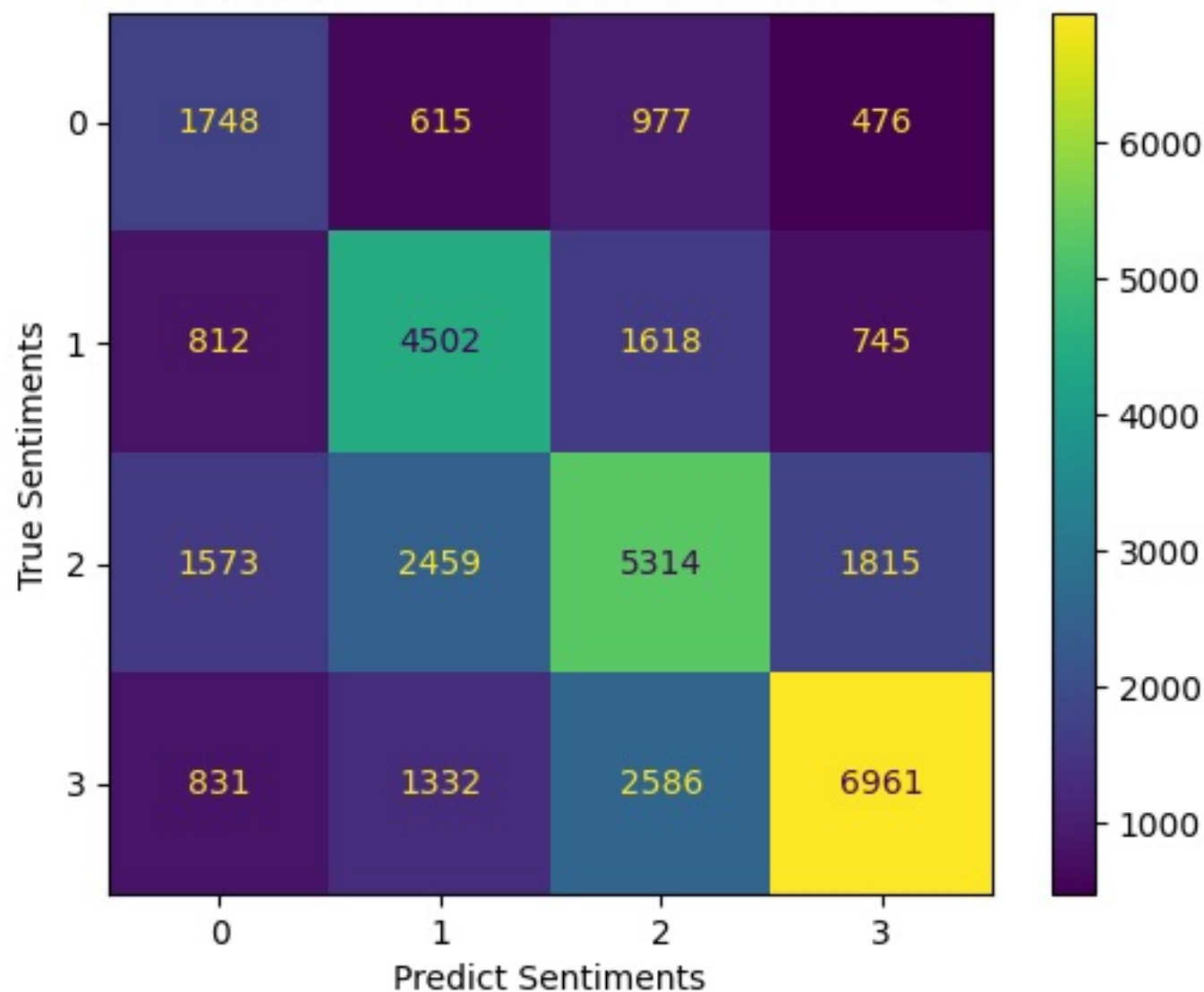


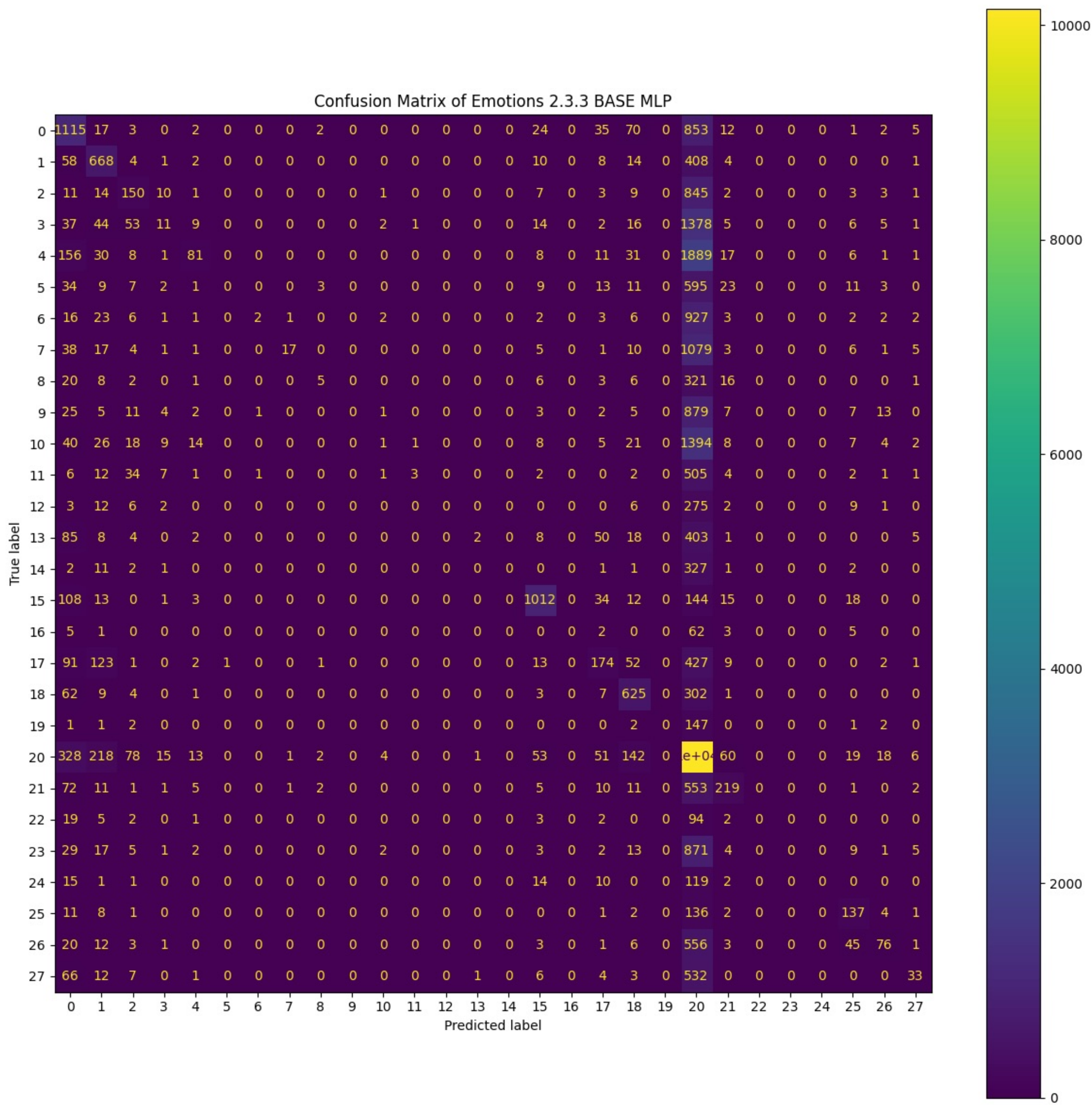
Confusion Matrix of Sentiments 2.3.1 BASE MNB



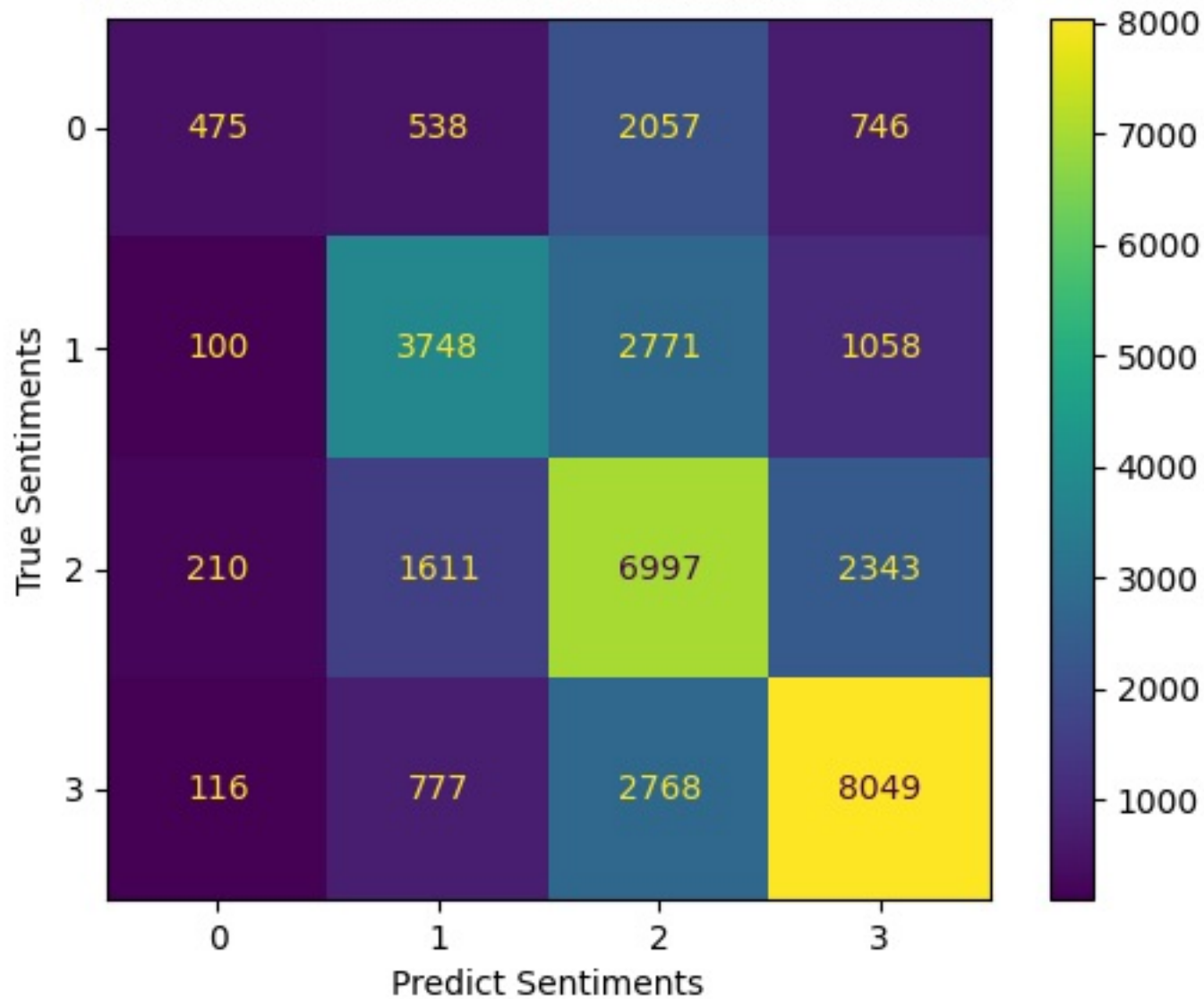


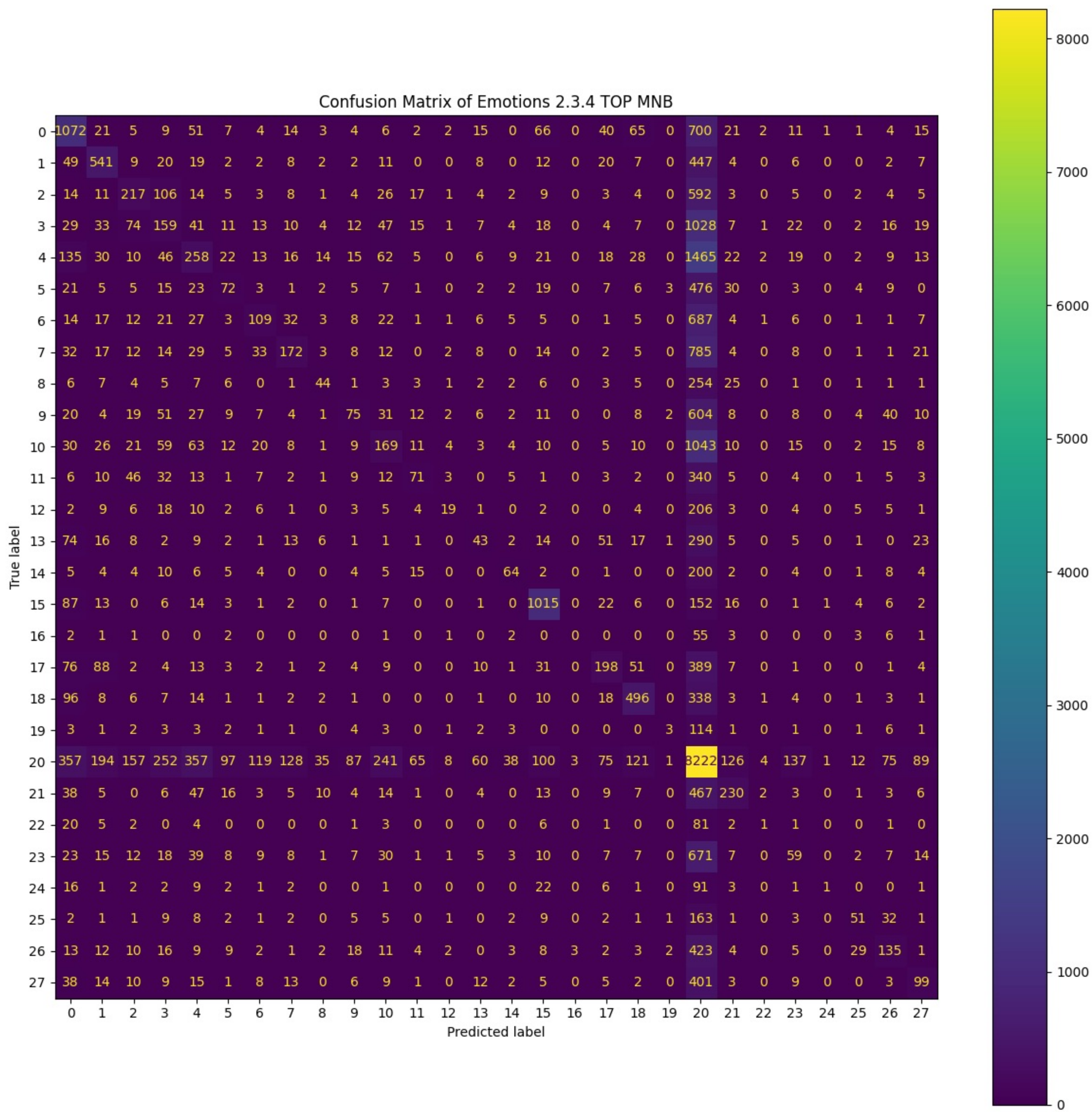
Confusion Matrix of Sentiments 2.3.2 BASE DT



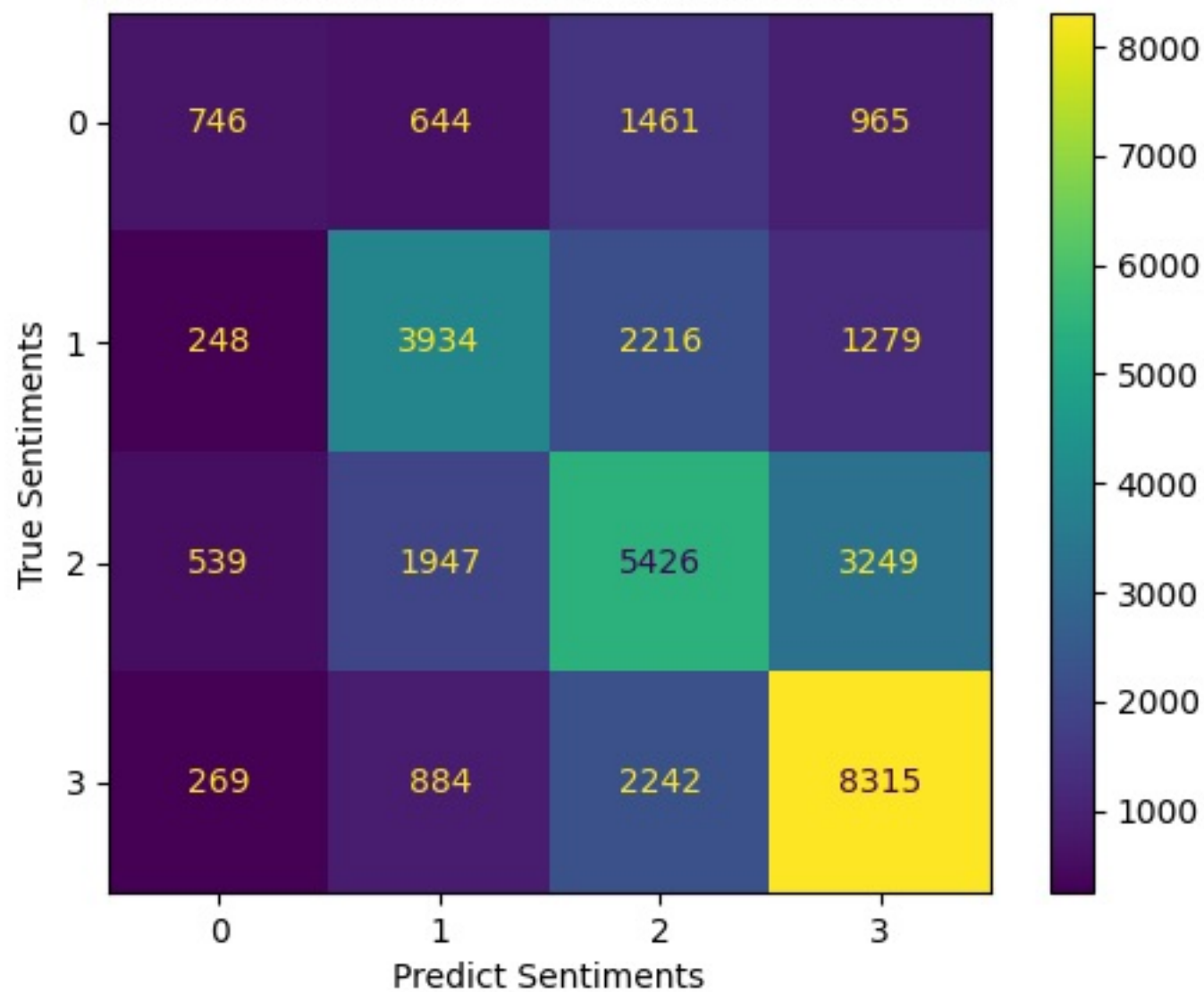


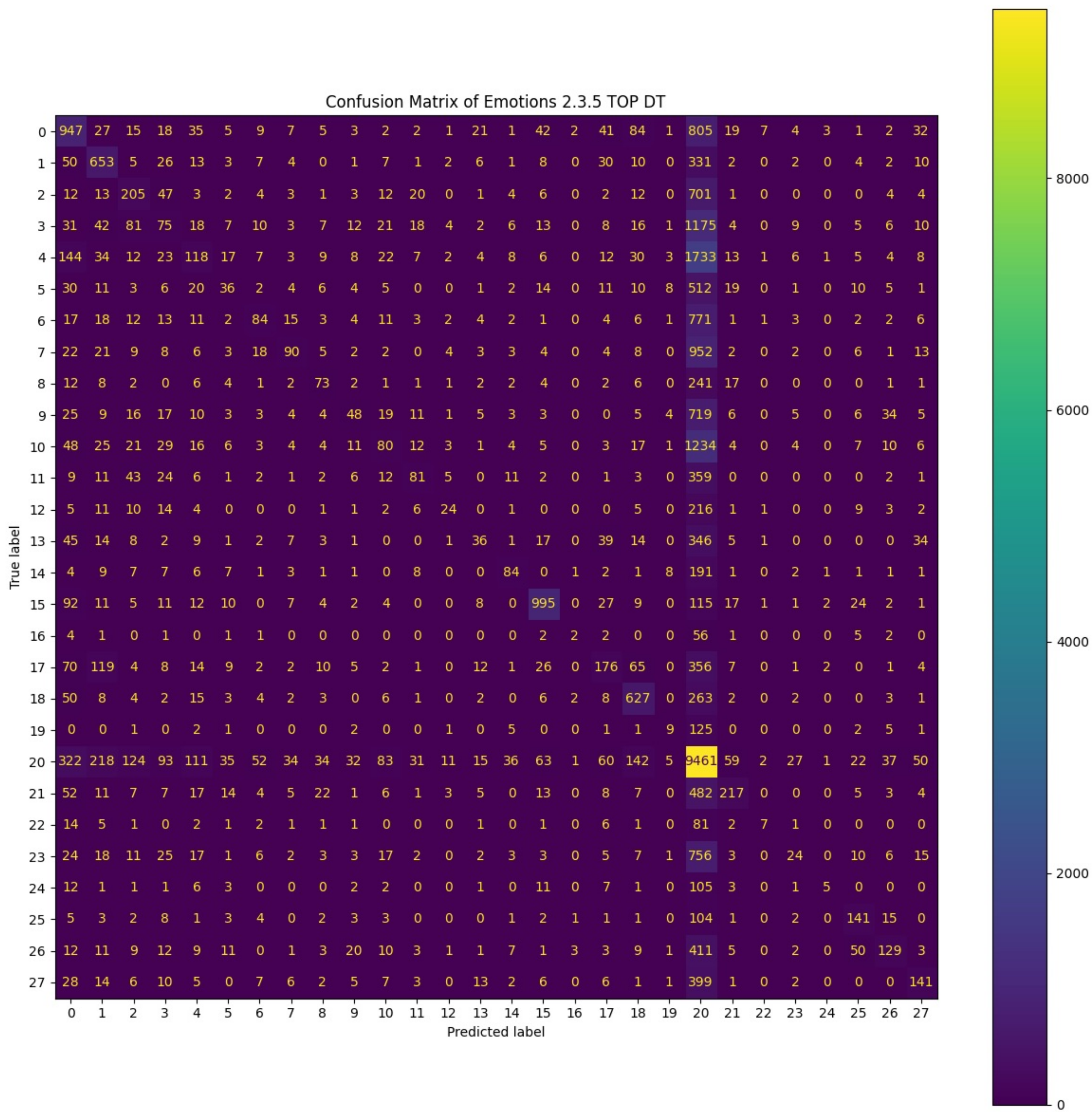
Confusion Matrix of Sentiments 2.3.3 BASE MLP



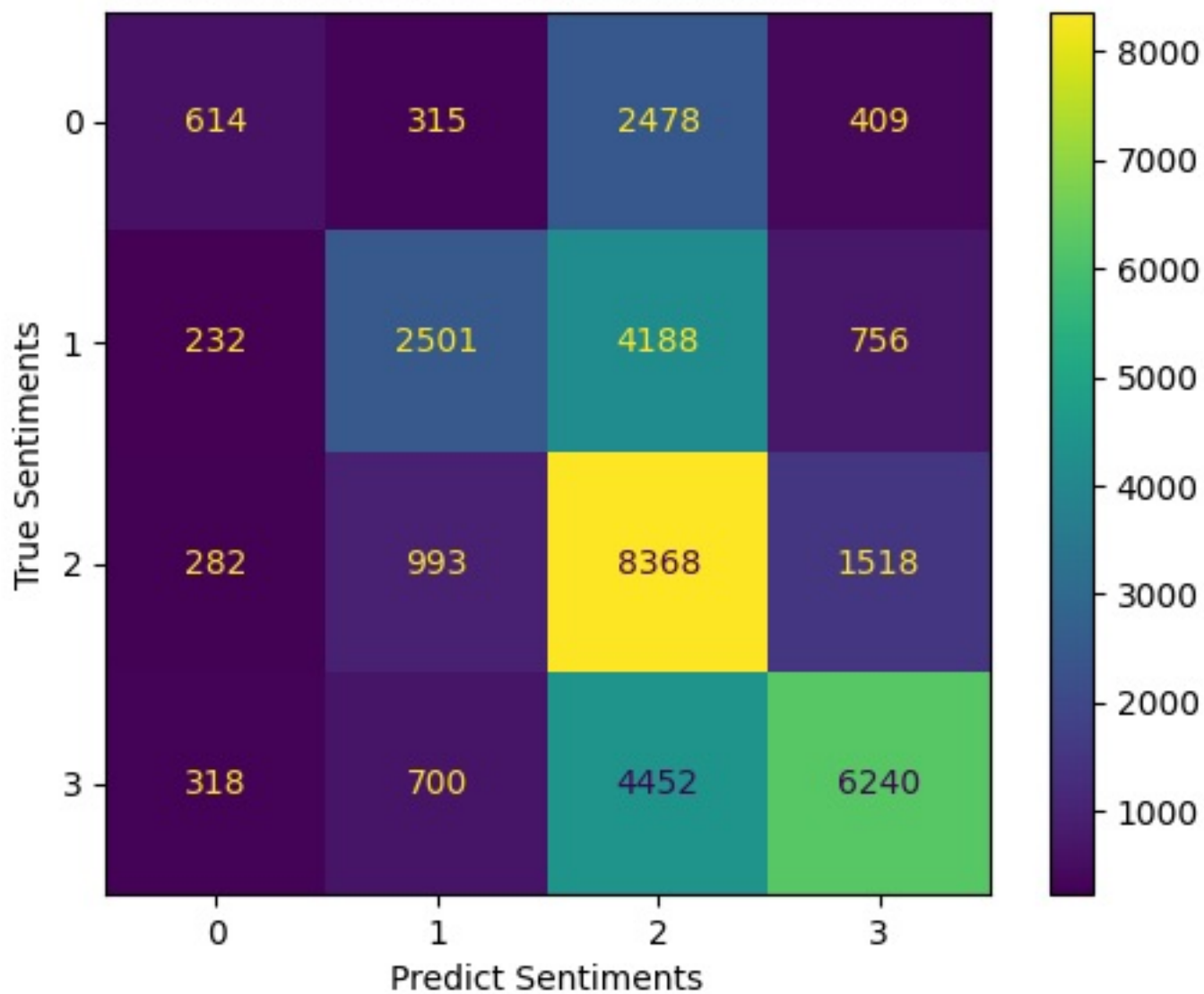


Confusion Matrix of Sentiments 2.3.4 TOP MNB

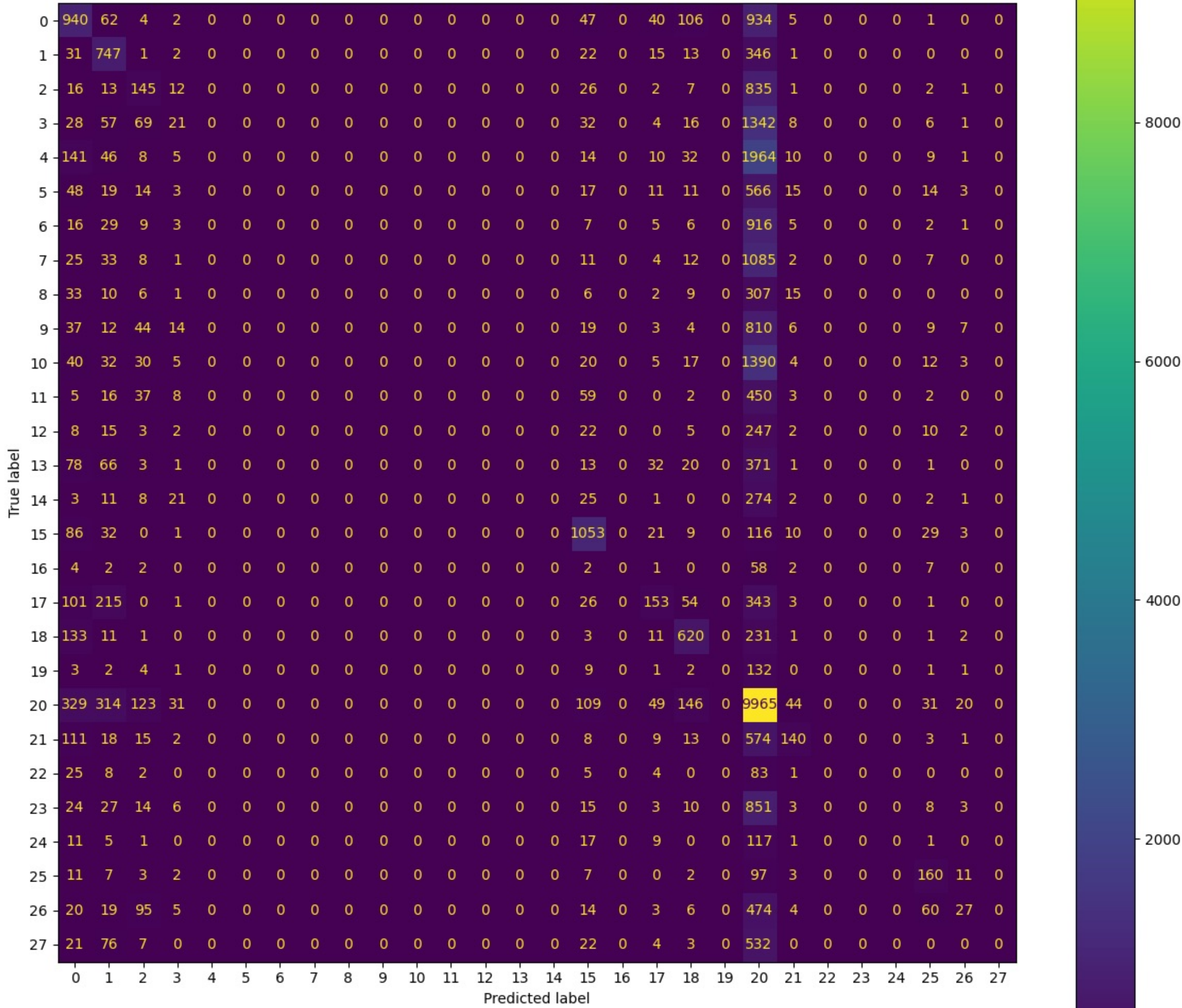




Confusion Matrix of Sentiments 2.3.5 TOP DT



Confusion Matrix of Emotions 2.3.6 BASE MLP



Confusion Matrix of Sentiments 2.3.6 BASE MLP

